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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
HANG, VU B				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

09/955,136

Applicant(s)

TOKURA, YUTAKA

Examiner

Vu B. Hang

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29 and 33-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29 and 33-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

- This office action is responsive to the communication filed on 02/13/2009.
- The amendments received on 02/13/2009 have been entered and made of record.
- Claims 29 and 33-37 are pending in the current application.

Response to Arguments

1. Applicant's arguments filed on 02/13/2009 have been fully considered but they are not persuasive. The applicant argues that the cited prior art Kato (US Patent 5,978,557), Idehara (US Patent 6,912,057 B 1), and Chen et al. (US Patent 5,822,506), fail to disclose or suggest (i) discriminating, for each of a plurality of pages in a single print job, whether the page is a color page or a monochromatic page, the single print job being issued based on a single print request; (ii) discriminating whether or not a succeeding page is serial to a page previously outputted by a printer; and (iii) adding, to the print data to be outputted, an ejection command, based on the discrimination for the succeeding page and on obtained ejection function information for a color printer and a monochromatic printer, such that an ejection position is changed in an ejection manner according to the ejection function provided in a selected printer, when the succeeding page is not serial to the page previously outputted by that printer. The examiner disagrees for the following reasons.

2. Kato discloses a discriminating means for discriminating, for each page in a print document, whether the page is a color or monochromatic page (see Fig.2 (11,21), Fig.3 (40,41,42,43), Fig.4 (\$8,\$9,\$12), Fig.7, Col.1, Line 57-65, Col.5, Line 35-48 and Col.8, Line 14-30). The pages of the print document 40 of Figure 3 (from a print request) are discriminated and

routed to a color printer or a monochromatic printer for printing. Kato also teaches that the replacement pages representing the color pages can be printed and stacked offset (see Fig.3 (40,41,42,43) and Col.5, Line 35-48), and adding a color flag to the print data of a current page for specifying whether the page is a color page or a monochromatic page (see Fig.4 (\$8), Col.5, Line 56-61 and Col.6, line 4-9), and for routing the page to either the color printer or the monochromatic printer based on the flag information (see Fig.7, Fig.8 and Col.6, Line 31-39). This shows that Kato suggest the use of ejection function information for a color printer and a monochromatic printer. Therefore, in the examiner's opinion Kato discloses (i) "discriminating, for each of a plurality of pages in a single print job, whether the page is a color page or a monochromatic page, the single print job being issued based on a single print request".

3. Idehara teaches a method for printing color and monochromatic pages in a document (see Fig.2A (S102,S106,S116) and Col.2, Line 1-10) wherein the index data for determining whether a current page is color page or monochromatic page is added to the print data of the current page (see Fig.2A (S 102,S 106,S 116) and Col.3, Line 36-43). Idehara further teaches printing and sorting the color and monochromatic pages by groups (see Fig.1 (19,101,102), Fig.2A (S106,S108,S109,S116,S118,S119) and Col.3, Line 59-67) and determining whether the succeeding pages of a group are continuous or not (see Fig.2A (S107,S117), Col.4, Line 6-19 and Col.4, Line 48-52). Idehara also teaches changing sorter bins based on whether the current page belongs to the color group or the monochromatic group (see Fig. 1 (19,101,102), Fig.2A (S107,S108,S117,S118), Col.3, Line 59-67 and Col.4, Line 14-32). Idehara (and Kato) teaches adding information to print data for discriminating whether the current page to be printed is color or monochromatic. The information added to the print data can be treated as an ejection function

command. Idehara, as mentioned above, also teaches determining whether the succeeding pages of a group are continuous or not, and determining whether a current page is color or monochromatic. In the examiner's opinion, Kato and Idehara, together, suggest (ii) "discriminating whether or not a succeeding page is serial to a page previously outputted by a printer" and "adding, to the print data to be outputted, an ejection command, based on the discrimination for the succeeding page and on obtained ejection function information for a color printer and a monochromatic printer, such that an ejection position is changed in an ejection manner according to the ejection function provided in a selected printer, when the succeeding page is not serial to the page previously outputted by that printer".

4. Regarding the cited prior art Chen et al. (US Patent 5,822,506), Chen was cited for teaching performing print processing, such as post-print processing and media handling (offset stacking), based on information specified in the print data stream.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 29 and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (US Patent 5,978,557) in view of Idehara (US Patent 6,912,057 B 1), and in further view of Chen et al. (US Patent 5,822,506).

7. Regarding **Claims 29 and 33**, Kato discloses a print control apparatus connected to a color printer and a monochromatic printer (see Fig.8, Col.1, Line 45-50 and Col.8, Line 60-61), the information processing apparatus comprising: a discriminating unit that discriminates, for each of a plurality of pages in a single print job, whether the page is a color page or a monochromatic page (see Fig.1 (1,3), Fig.3 (40,41,42,43), Fig.4 (\$8,\$9,\$12), Fig.7, Col.1, Line 57-65, Col.5, Line 35-48 and Col.8, Line 14-30); a determination unit that determines whether the page is to be output to the color printer or the monochromatic printer based on the discrimination made by the discriminating unit (see Fig.4 (\$8,\$9,\$12), Fig. 10, Col. 1, Line 57-65 and Col.8, Line 14-30); and an output unit that outputs print data of the page to the printer based on determination made by the determination unit (see Fig.4 (\$8,\$9,\$12), Fig.7, Fig.8, Col.1, Line 57-65 and Col.8, Line 14-30). Kato fails to disclose an obtaining unit that obtains information about what kind of paper ejection function is provided in the printers; a discriminating unit for discriminating whether or not a succeeding page is serial to a page previously outputted by the printer; and an adding unit that adds to the print data to be output by the output unit, an ejection command based on the ejection function information obtained by the obtaining unit, such that the ejection position is changed when a succeeding page is not serial to the page previously outputted by the printer.

8. Kato, however, teaches adding a color flag to the print data of a current page for specifying whether the page is a color page or a monochromatic page (see Fig.4 (\$8), Col.5, Line 56-61 and Col.6, line 4-9), and for routing the page to either the color printer or the monochromatic printer based on the flag information (see Fig.7, Fig.8 and Col.6, Line 31-39). Kato further teaches that the page color information and the page insertion position information

can be set by a user on the a menu screen (see Fig.1 (6,8), Fig.8 and Col.5, Line 56-61). Idehara teaches a method for printing color and monochromatic pages in a document (see Fig.2A (S102,S106,S116) and Col.2, Line 1-10) wherein the index data for determining whether a current page is color page or monochromatic page is added to the print data of the current page (see Fig.2A (S 102,S 106,S 116) and Col.3, Line 36-43). Idehara further teaches printing and sorting the color and monochromatic pages by groups (see Fig.1 (19,101,102), Fig.2A (S106,S108,S109,S116,S118,S119) and Col.3, Line 59-67) and determining whether the succeeding pages of a group are continuous or not (see Fig.2A (S107,S117), Col.4, Line 6-19 and Col.4, Line 48-52). Idehara also teaches changing sorter bins based on whether the current page belongs to the color group or the monochromatic group (see Fig. 1 (19,101,102), Fig.2A (S107,S108,S117,S118), Col.3, Line 59-67 and Col.4, Line 14-32). Chen teaches a printing system wherein post-print processing is specified in the print data stream (see Fig. 1 and Col. 1, Line 6-14). Chen further teaches that the print data stream enables for the printer to specify a type of post-print processing or media handling (see Fig. 1, Fig.5 (94), Col.2, Line 4-18 and Col.3, line 42-60). Chen also teaches that the post-print processing can include bin selection and offset stacking for job separation (see Fig.2 (30) and Col.3, Line 52-56).

9. Kato, Idehara and Chen are combinable because they are from the same field of endeavor, namely print communication systems. At the time of the invention, it would have been obvious for one skilled in the art to include to Kato's apparatus an obtaining unit that obtains information about what kind of paper ejection function is provided in the printers; and an adding unit that adds to the print data to be output by the output unit, an ejection command based on the ejection function information obtained by the obtaining unit, such that the ejection position is

changed when a succeeding page is not serial to the page previously outputted by the printer. The motivation would be to automatically group the printed color sheets from the printed monochromatic sheets. The ejection command specified in the print job would enable for the color sheets and the monochromatic sheets to be grouped together by either offset stacking in the same out put bin or through ejections of the printed sheets to separate output bins. The ejection type information would dictate whether offset stacking or separate bin ejection is to be used. It is further obvious to include to Kato's apparatus a discriminating unit for discriminating whether or not a succeeding page is serial to a page previously outputted by the printer. The motivation would be to group and rout the pages to either the color printer or the monochromatic printer, based on the color discrimination.

10. Regarding **Claims 34 and 36**, Chen further teaches specifying in the print data stream a command for shifting the ejection position from one position in a tray to a second position in that same tray {Note: This is also known as offset stacking} (see Fig. 1, Fig.2 (30), Fig.5 (94), Col.2, Line 4-18 and Col.3, Line 52-56).

11. Regarding **Claims 35 and 37**, Idehara further teaches using a command for ejection of the printed sheets to another bin (see Fig.1 (19,101,102), Fig.2A (S107,S108,S117,S118), Col.3, Line 59-67 and Col.4, Line 14-32).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu B. Hang whose telephone number is (571)272-0582. The examiner can normally be reached on Monday-Friday, 9:00am - 6:00pm.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vu B. Hang/
Examiner, Art Unit 2625

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625